



Serial No.: 10/010,731
Confirmation No.: 4312
Applicant: Jihong Liang et al.
Atty. Ref.: 11899.0193.DVUS02

IN THE CLAIMS:

Please amend the claims in the following manner:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled)

14. (Canceled)

15. (Currently amended) A recombinant host cell comprising a DNA segment encoding one or more ~~[an]~~ antifungal ~~[polypeptide]~~ polypeptides, wherein said polypeptide is selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:14.

16. (Currently amended) The recombinant host cell of claim 34 further defined as a potato ~~[plant]~~ cell.

17. (Currently amended) A method of making ~~[using a DNA segment that encodes]~~ an antifungal polypeptide, comprising the steps of:

- a) preparing a recombinant vector comprising a DNA segment encoding ~~[said]~~ an antifungal polypeptide, wherein said polypeptide is selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:14, and wherein said DNA segment is positioned under the control of a promoter that functions in a host cell;
- b) introducing said recombinant vector into a host cell;
- c) culturing said host cell ~~[under conditions effective]~~ to allow expression of the encoded antifungal polypeptide; and
- d) collecting said expressed antifungal polypeptide.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Currently amended) A transgenic plant having incorporated into its genome a transgene comprising a DNA molecule having a nucleotide sequence that encodes ~~[an]~~ one or more antifungal ~~[polypeptide]~~ polypeptides selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:14, wherein said nucleotide sequence is selected from the group consisting of a) the nucleotide sequence as set forth in [of FIG. 1] SEQ ID NO:10 from position 92 through position 307, b) the nucleotide sequence as set forth in SEQ ID NO:10 from ~~[about]~~ position 18 through ~~[about]~~ position 507, c) the nucleotide sequence as set forth in SEQ ID NO:13 from ~~[about]~~ position 105 to ~~[about]~~ position 242, and d) the nucleotide sequence which ~~[through the degeneracy of the genetic code]~~ encodes the same peptide as that encoded by the nucleotide sequence of a), b), or c) ~~[-e) the complement of any of a), b), c), or d), and f) the nucleotide sequence that hybridizes to any of a) e) under stringent hybridization conditions]~~.

26. (original) The transgenic plant of claim 25 wherein the polypeptide has the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO: 14.

27. (canceled)

28. (Currently amended) Progeny of the plant of claim 25, wherein said progeny ~~[comprise]~~ comprises said DNA molecule.

29. (Currently amended) ~~[Seeds]~~ Seed or progeny from the plant of claim 25, wherein said seed ~~[comprise]~~ comprises said DNA molecule.

30. (canceled)

31. (Canceled)

32. (Canceled)

33. (Currently amended) A method of controlling a plant fungus, said method [~~comprising providing to a plant an antifungal effective amount of the polypeptide selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:14,~~] comprising transforming a plant with a vector comprising a DNA encoding an antifungal polypeptide having the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO:14, and allowing expression of said antifungal polypeptide, wherein [an] said antifungal [effective amount of the encoded] polypeptide is [produced] expressed in said plant.

34. (Currently amended) The recombinant host cell of claim 15 further defined as a plant cell, said plant cell being from a member selected from the group consisting of apple, alfalfa, barley, broccoli, cabbage, canola, carrot, citrus, corn, cotton, garlic, oat, onion, pea, peanut, pepper, potato, rice, rye, sorghum, soybean, strawberry, sugarbeet, sugarcane, tomato, turf grasses, and wheat.